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(71) Applicant (*for all designated States except US*): **Hanool Robotics Corp** [KR/KR]; 461-68 Jeonmin-Dong, Yuseong-Gu, Daejeon 305-390 (KR).

(72) Inventors; and

(75) Inventors/Applicants (*for US only*): **JUNG, Ui-Jung** [KR/KR]; 286-5 Jeonmin-Dong, Yuseong-Gu, Daejeon 305-810 (KR). **CHOI, Goon-Ho** [KR/KR]; Hyundai Yeoulme Apt. 607dong 1301ho, Jeonmin-Dong, Yuseong-Gu, Daejeon 305-330 (KR). **KIM, Byung-Soo** [KR/KR]; Hanmael Apt. 111dong, 1302ho, Songkang-Dong, Yuseong-Gu, Daejeon 305-503 (KR).

(74) Agents: **CHANG, Soon-Boo** et al.; 1675-12, 8th Fl, Mointer Bldg., Seocho-Dong, Seocho-Gu, Seoul 137-070 (KR).

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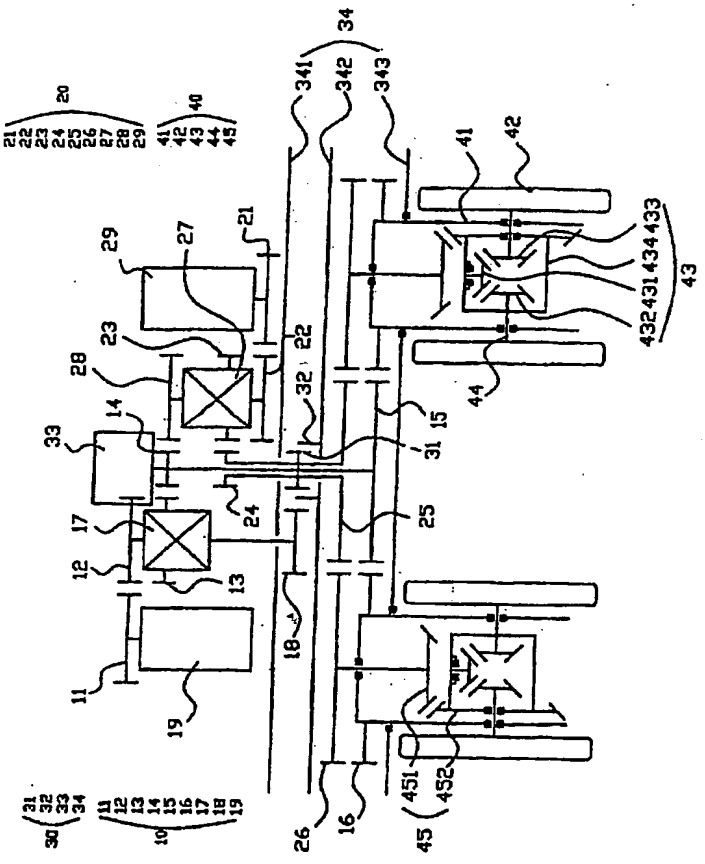
(54) Title: DECOUPLED SYNCHRO-DRIVE MOBILE ROBOT BASE



(57) Abstract: The present invention provides a synchro-drive mobile robot base which allows a robot to accomplish a 360° endless rotation through a triple shaft mechanism, while a turret, a steering unit and a drive unit are decoupled from each other. The mobile robot base includes the turret (34) having thereon a turret motor (33), a drive motor (29) and a steering motor (19); the steering unit (10) which has a differential gear unit and transmits an actuating force generated from the steering motor (29) to a wheel case (41); a drive unit (20) which has a differential gear unit and transmits an actuating force generated from the drive motor (29) to the wheel (42); and a turret rotating unit (30) which transmits an actuating force generated from the turret motor (33) to the turret (34). A part of the differential gear unit of the drive unit (20) is coupled to the steering unit (10), while a part of the differential gear unit of the steering unit (10) is coupled to the turret rotating unit (30), so that the drive motor (29), the steering motor (19) and the turret motor (33) are decoupled from each other.

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